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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,858	06/25/2003	Tracy C. Klaus	2291-001	2106

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EXAMINER

DOLE, TIMOTHY J

ART UNIT	PAPER NUMBER
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2858

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,858

Applicant(s)

KLAUS, TRACY C.

Examiner

Timothy J. Dole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 6, 9-11 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melendez in view of Dvorachek.

Referring to claims 1, 5, 6 and 11, Melendez discloses an improved diagnostic apparatus for diagnosing and servicing pneumatic braking systems of trailers comprising; a pneumatic circuit (fig. 2), adapted for connection to pneumatic braking systems on the trailer; means (fig. 2 (108)), responsive to an electrical signal, for cycling the pneumatic circuit between an applied state wherein air is supplied to the trailer's pneumatic braking systems and a released state wherein air is released from the trailer's pneumatic braking systems (column 4, lines 28-31); a timer circuit (fig. 3 (10)-(13)), electrically connected to the means for cycling the pneumatic circuit for controlling a timed interval between the applied state and the released state, the timed interval being adjustable (column 4, lines 56-63); a diagnostic brake light circuit adapted for connection to a brake light circuit on the trailer, the diagnostic brake light circuit having a circuit switch operable to transmit an electrical signal in on-state and having an indicator means for connection thereto (column 3, line 60 – column 4, line 5); and a plurality of diagnostic signaling circuits

each circuit adapted for connection to signaling circuits on the trailer (column 3, line 60 – column 4, line 5), each diagnostic signaling circuits having a circuit switch means (fig. 3 (14)-(18)), operable between an off-state and an on-state and having an indicator means (fig. 3 (114)-(118)) for connection thereto.

Melendez does not disclose a pressure actuated switch, connected between the means for cycling the pneumatic circuit and the diagnostic brake light circuit, and operable between an electrically conductive state when pressure is applied to the pressure actuated switch and an electrically non-conductive state when pressure is released from the pressure actuated switch, wherein when the pneumatic circuit is in the applied state causing pressure to be applied to the pressure actuated switch and when the diagnostic brake light circuit is in the on-state, the electrical signal from the brake light switch is conducted through the pressure actuated switch to the means for cycling the pneumatic circuit, maintaining the pneumatic circuit in the applied state, regardless of the state of the timer circuit..

Dvorachek discloses a pressure actuated switch (fig. 2), connected between the means for cycling the pneumatic circuit and the diagnostic brake light circuit, and operable between an electrically conductive state when pressure is applied to the pressure actuated switch and an electrically non-conductive state when pressure is released from the pressure actuated switch (column 2, lines 14-22), wherein when the pneumatic circuit is in the applied state causing pressure to be applied to the pressure actuated switch and when the diagnostic brake light circuit is in the on-state, the electrical signal from the brake light switch is conducted through the pressure actuated switch to the means for

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cycling the pneumatic circuit, maintaining the pneumatic circuit in the applied state, regardless of the state of the timer circuit.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the pressure actuated switch of Dvorachek into the apparatus of Melendez for the purpose of activating the actual brake lights on the trailer to provide indication for visual inspection (column 2, lines 18-22).

Referring to claims 9, 10 and 16-18, Melendez discloses the apparatus as claimed wherein the indicator means is an indicator light, which is either an LED or an incandescent light (column 4, lines 5-7).

3. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melendez and Dvorachek as applied to claims 1 and 11 above, and further in view of Zeleney.

Referring to claims 2 and 12, Melendez as modified discloses the apparatus as claimed except wherein the means for cycling the pneumatic circuit is a solenoid.

Zeleney discloses a pneumatic brake tester wherein the means for cycling the pneumatic circuit is a solenoid (abstract).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the solenoid of Zeleney into the apparatus of Melendez as modified for the purpose of providing a well known alternative for providing air to the braking system (abstract).

4. Claims 3, 4, 7, 8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melendez and Dvorachek as applied to claim 1 above, and further in view of Gutierrez.

Referring to claims 3, 4 and 15, Melendez as modified discloses the apparatus as claimed except wherein the timer circuit and each diagnostic signaling circuit further comprises a circuit breaker, operable between the circuit switch and the corresponding signaling light circuit on the trailer.

Gutierrez discloses a trailer system tester wherein the timer circuit and each diagnostic signaling circuit further comprises a circuit breaker (fig. 2 (CB-1)-(CB-6)), operable between the circuit switch and the corresponding signaling light circuit on the trailer (fig. 2).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the circuit breakers of Gutierrez into the apparatus of Melendez as modified for the purpose of providing over current protection (column 4, lines 45-55).

Referring to claims 7 and 13, Melendez as modified discloses the apparatus as claimed wherein the plurality of diagnostic signaling circuits further comprise: a left turn signal diagnostic circuit (fig. 3 (15) and (115)); a right turn signal diagnostic circuit (fig. 3 (14) and (114)); and a marker light diagnostic circuit (fig. 3 (18) and (118)).

Melendez as modified does not disclose a tail light diagnostic circuit or an ABS brake light diagnostic circuit.

Gutierrez discloses a tail light diagnostic circuit (fig. 2 (42) and (38)) and an ABS brake light diagnostic circuit (column 5, lines 23-29).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the diagnostic circuits of Gutierrez into the apparatus of

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Melendez as modified for the purpose of providing a more thorough test by checking additional lighting circuits.

Referring to claims 8 and 14, Melendez as modified discloses the apparatus as claimed wherein each of the left and right turn signal diagnostic circuits further comprise a flasher (fig. 3 (4)) for transmitting an intermittent power signal from corresponding left and right turn signal circuits on the trailer to the diagnostic apparatus.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to show the state of the art with respect to trailer testing.

USPN 5,488,352 to Jasper: This patent shows a control system for a trailer including an ABS diagnostic section.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Dole whose telephone number is (571) 272-2229.

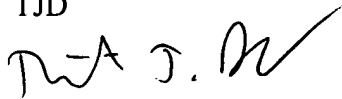
The examiner can normally be reached on Mon. thru Fri. from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (571) 272-2233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJD



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